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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/628,919	07/31/2000	Jeffrey B. Thompson	10003696-1	5033

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COCHRAN FREUND & YOUNG LLC
3555 STANFORD ROAD
SUITE 230
FORT COLLINS, CO 80525

EXAMINER	
LAO, SUE X	
ART UNIT	**PAPER NUMBER**
2126	8

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/628,919	THOMPSON, JEFFREY B.	
	Examiner	Art Unit	
	S. Lao	2126	

-- The MAILING DATE of this c mmunication appears on the cover sheet with the corresp nd nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are presented for examination.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-4, 8, 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Birze (US Pat. 6,526,457).

As to claim 1, Birze teaches a method for creating extendable object-oriented code (utility object, col. 3, lines 48-49) comprising:

defining a data-type (operating system utility) to include a base class (base class for a utility) and an additional properties portion (virtual member function for using the utility object);

defining the base class in terms of known properties (synchronization properties/functionality of mutex semaphores); and

reserving the additional properties portion for a future modification to the data-type (virtual member function is defined to create a derived class implementation of utility object). See col. 4, lines 22-50; col. 5, lines 1-5.

As to claim 2, Birze teaches the base class includes properties that are capable of being understood by (generic to all) a plurality of interconnected devices (computers having different operating systems, col. 1, lines 11-15).

As to claim 3, Birze teaches creating a new data-type by using an existing base class (base class) and adding anew attribute to the additional properties portion (supply definitions via derived class) (col. 4, lines 22-50; col. 5, lines 1-5).

As to claims 4, 13, Birze teaches the additional properties portion comprises a name-value pair ('HANDLE semID' for the Win32 mutex semaphore handle) (col. 5, lines 25-29).

As to claim 8, Birze teaches a method for creating an extendable class-based shared data-type (operating system utility) for use in object oriented programming [col. 3, lines 54-62] comprising:

creating a first data-type (generic operating system utilities such as MutexSemorephore) comprising a first base class (base class) that includes initial properties (member functions) (code listing, col. 4, lines 31-41); and

creating a second data-type (operating system utilities for a particular operating system) comprising: the first base class (includes the base class) and a second additional properties portion having a new attribute (ID for Win32 mutex semaphore) (col. 5, lines 11-29).

As to claim 12, Birze teaches the first data-type further comprises a first additional properties portion (virtual member functions, col. 4, lines 31-41).

As to claim 14, Birze teaches a software system comprising:

a storage medium (memory 12); and

a software program (col. 3, lines 54-62) stored on the storage medium for creating an extendable object-oriented data-type (operating system utility), wherein the data-type as comprises: a base class (base class) that defines base characteristics of the data-type (code listing, col. 4, lines 38-41); and an additional properties portion (virtual member functions, col. 4, lines 34-37).

4. Claims 5-7, 9-11, 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birze (US Pat. 6,526,457) as applied to claims 2, 8, 14 and in view of Cowsar et al (US Pat. 5,615,400).

As to claims 5 and 6, Cowsar teaches a method for creating extendable object-oriented code (managing code for use by client computers), including defining a data-type (class, col. 3, lines 33-37) to include a type identifier (class ID) that provides a unique identification for a data-type (identifies particular, col. 3, lines 16-17), and

wherein a class / base class (class, base class) can be determined (look up routine) from the type identifier by using a catalog (class catalog) that is maintained in each of a plurality of interconnected devices (resides in non-volatile memory) (col. 4, lines 45-65; col. 5, lines 6-11; col. 12, lines 31-50).

Given the teaching of Cowsar, it would have been obvious to define the data-type of Birze to include a type identifier that provides a unique identification for the data-type and to determine the base class from the type identifier by using a catalog maintained in each of a plurality of interconnected devices. One of ordinary skill in the art would have been motivated to combine the teachings of Birze and Cowsar because this would have allowed resources/class_libraries to be moved into and out of internal memory, revised and placed in different sections of internal memory (Cowsar, abstract), which provides more efficient memory management for object-oriented dynamic linking (Cowsar, col. 5, lines 34-37) of Birze (col. 2, lines 65-67).

As to claim 7, Birze teaches implementing the method for creating extendable object-oriented code with a well known object-oriented programming language (C++, col. 3, lines 54-62). Java is another well known object-oriented programming language. Therefore, it would have been obvious to implement the method for creating extendable object-oriented code with Java.

As to claims 9-11, Birze as modified by Cowsar teaches (Cowsar) the first data-type further comprises a type identifier (class ID) that provides information (class catalog records, fig. 2) about the first base class; the information is unique to (identifies the particular) the data-type and can be used by a recipient (client) to determine the properties of the data-type (look up routine); the recipient can cross-reference (look up / query) the type identifier (class ID) using a catalog (class catalog) to determine properties of the first base class. Refer to claims 5-6 for detailed discussion.

As to claims 15-17, Birze as modified by Cowsar teaches (Cowsar) the data-type further comprises a type identifier (class ID); the type identifier is unique to (identifies the particular) the data-type and provides information regarding the data-type (query class catalog to obtain class record); the type identifier can be cross referenced (look up / query using class ID) using a catalog (class catalog) to determine known characteristics of the data-type (class record). Refer to claims 5-6 for detailed discussion.

As to claim 18, note discussion of claim 4.

As to claim 19, Birze teaches the base class (base class) is known to a plurality of interconnected devices on which the software system is used (generic / not specific to any operating system, col. 4, lines 13-21).

As to claim 20, Birze teaches the new attribute (ID for Win32 mutex semaphore, col. 5, lines 11-29) may not be known to at least one of the plurality of interconnected devices (col. 6, lines 7-8; col. 5, lines 26-28).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (703) 305-9657. A voice mail service is also available at this number. The examiner's supervisor, SPE Meng-Ai An, can be reached on (703) 305 9678. The examiner can normally be reached on Monday - Friday, from 9AM to 5PM. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9306.
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

Sue Lao Sue Lao
March 5, 2004